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CYTISUS FOR NEW ENGLAND

AMONG the species of *Cytisus* are many plants that are only semi-hardy in New England, yet they are so colorful that they should always be considered when there is any possibility of their coming through the winter in good condition. In the first place, they are valuable assets to gardens because of their bright yellow flowers, although there are several with white, purple, or pale lemon-yellow flowers. Secondly, they add interest because their stems remain green all winter. Finally, they are of value because they are legumes and the nitrogen bearing nodules which form on their roots enrich the soil.

They are not difficult to grow, and many may be raised readily from seed. However they cannot be expected to survive every winter, and even in protected situations in the Arboretum some are killed to the ground during the very severe winters. A little south of Boston, on Cape Cod, they prove much hardier and splendid specimens may be seen. Even some of the beautiful flowering hybrids, so common in England, are seen here and there in Cape Cod and Newport gardens. In New England there are some species of particular interest, and a few of the better ones are listed below.

***Cytisus scoparius*.** This is the most common broom native of Europe and is the only one native to the British Isles. It is said to have been brought to this country as early as Captain John Smith's time by one of the early Virginia settlers, and it is well adapted to the eastern United States where it has escaped cultivation in several places, being particularly abundant in Nantucket. The Scotch broom is a bushy shrub which may grow 5 to 6 feet tall, although in the east it is considerably smaller because it is so often killed back by severe winters. The large pea-like flowers are colored a deep golden yellow and appear in May. The twigs are upright and green all winter. The name "broom" comes from the fact that there are so many upright twigs

that it is a comparatively simple matter to cut them off in large bunches, tie them together, and use them as a rough broom. There are several varieties growing in the Arboretum and many more in Europe. Among the most outstanding is var. *Andreanus* which is similar to the species in every way, except that the wing-petals and the standard petal are a rich brownish-crimson, adding considerably to the beauty of the flower.

There is also a double-flowered variety, as well as one (var. *pendulus*) with graceful pendulous branches, and one (var. *albus*) with pale yellow or nearly white flowers. These varieties are best propagated asexually, either by grafting on *Laburnum* stock or by cuttings taken in late August.

Cytisus nigricans. This species is a native of central and southeastern Europe and is in bloom at present in the Arboretum. It was highly recommended by Professor Sargent and E. H. Wilson because it never fails to bloom; each year it is covered with long terminal spikes of bright yellow flowers. In fact, it is easily recognized by these spikes when in bloom, for it is the only broom that blossoms during July and August that has these conspicuous flower spikes. Because it flowers on the growth made during the current year, any necessary pruning should always be done before growth starts in the early spring. When the blooming has ceased, the flower stalks might be removed to prevent seeding and so conserve the energy of the plant for vegetative growth. Because the flowers of this particular species turn black when dried, Linnaeus gave it the specific name *nigricans*. It has been growing in the Arboretum since 1906 and consistently has produced large numbers of flower spikes in the early summer. Wherever summer bloom is desired, this splendid ornamental should have its place.

Cytisus praecox. During the past two years the Warminster broom has been conspicuous in the collection on the top of Bussey Hill where many fine specimens are growing. In the spring this plant is the most conspicuous in the entire *Cytisus* collection and has proved to be one of the most popular with Arboretum visitors. The bushes are covered with very pale, lemon-yellow flowers, an easy reminder to even the casual observer that there are few woody plants blessed with this unusual shade of yellow. The species is a hybrid between *C. multiflorus* and *C. purgans* and is called the Warminster broom, for it first appeared in the nursery of Wheeler of Warminster in England about 1867. Today it is available from one or two nurseries in this country. Because it does not come true from seed, it should be propagated by cuttings taken in August.

Its very dense habit of growth and slender, erect branches appear very graceful even in the slightest breeze. In the Arboretum the plants are about 3 feet tall, and when covered with pale yellow flowers they are a most pleasing spectacle.

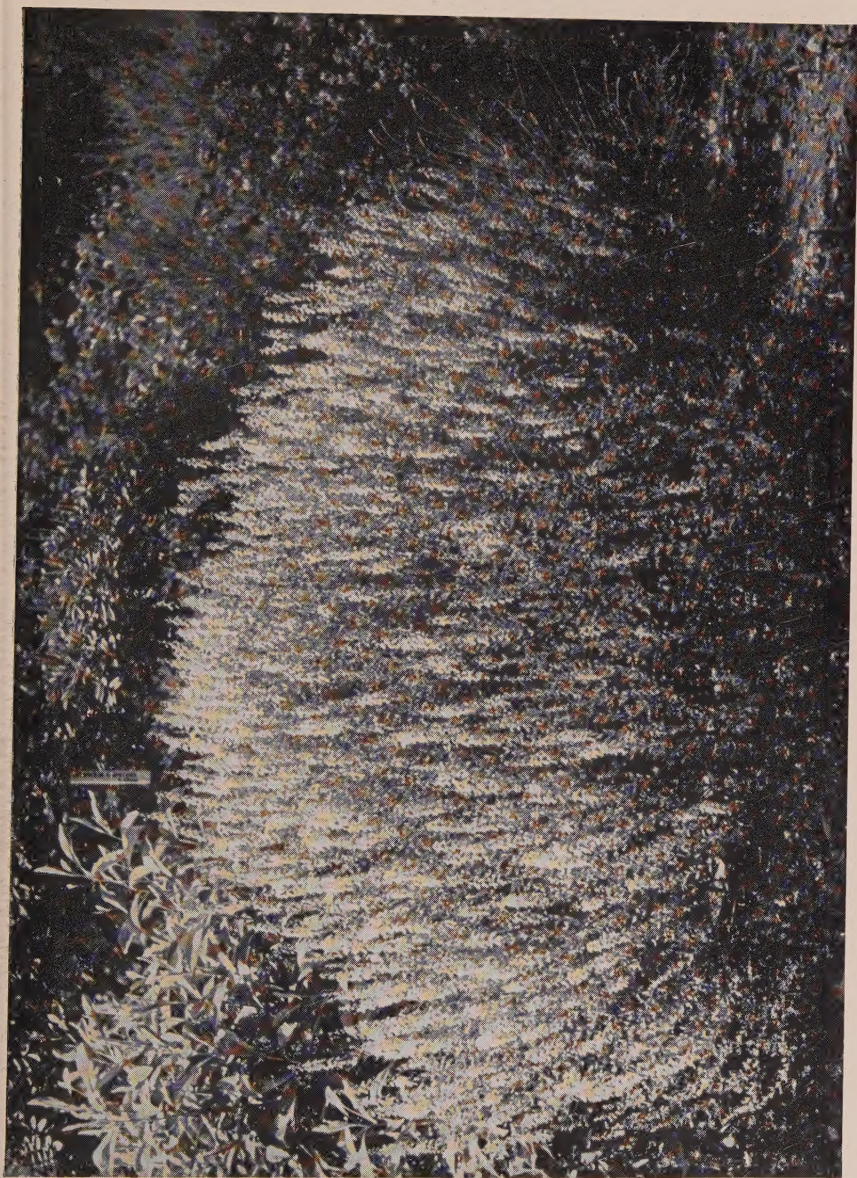


PLATE XI
Cytisus nigricans, the spike broom.

Cytisus purpureus. This procumbent shrub seldom grows over 1½ feet tall and in May it is highly valued for its purple flowers which are borne on the growth made the previous year. The branches often arch gracefully from the base of the plant, making a dense, slightly rounded mass of purple flowers. Unusual among the brooms because of its purple flowers, this species is one of the best of the low brooms. A white flowered variety (*alba*) is another valued ornamental.

Other hardy species of note are *C. ratisbonensis* with yellow flowers borne along its arching branches (a native of Europe, particularly abundant in Hungary and the Balkans where it occasionally grows as tall as 6 feet), one of the hardiest of the brooms in the collection at the Arboretum, *C. austriacus* with its flowers in heads at the end of upright branches, and *C. albus* which is similar but has white flowers.

Dwarf Brooms. For planting on sunny banks or on top of exposed rocks *Cytisus purgans*, *C. Ardoinii*, *C. Beanii*, and *C. decumbens* are admirably suited. All are prostrate with numerous, slender radiating branches which form masses of color near the ground. The best is *C. Beanii*, a chance hybrid between *C. Ardoinii* and *C. purgans*, with large deep golden-yellow flowers borne singly or in pairs from each joint of the previous year's growth. This plant blossoms so freely that the twigs and leaves are frequently hidden by the wealth of flowers. It is quite hardy in the Arboretum even though one of its parents, *C. Ardoinii*, is not. *Cytisus decumbens*, with its bright yellow flowers in clusters along the shoots, is perhaps the most prostrate of all.

The growing season this year has been very long due to the abundant rains and comparatively cool weather. Most of the shrubs and trees show splendid growth and many a vigorous secondary growth. The moist weather has caused leaf and twig blight disease on the plane trees, and unfortunately this same disease had made headway on a few of the white oaks. Another year a definite attempt will be made to control this disease by spraying with Bordeaux mixture during the growing season. Although the winter was mild, considerable winter injury was noted in the shrub collection, where many plants, even *Kolkwitzia amabilis*, were killed to the ground, whereas on higher ground other plants of the same species and varieties remained uninjured. The exact cause of such injury is difficult to explain, but probably was due to the sudden cold spells during early March, particularly on nights when there was little wind.

Cumulative index of the Bulletin of Popular Information. It has been suggested that a cumulative index of the Bulletin be published for the years 1916-38 inclusive. This would help readers who consult back numbers. The publication of such an index would take considerable time, but if Bulletin readers would like to have it, it can in all probability be done. Please write to the Bulletin of Popular Information expressing your views on this subject.

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